

### REMARKS

This is a full and timely response to the outstanding final Office Action mailed September 14, 2004 (Paper No. 20040909). Upon entry of this response, claims 29-55 are pending in the application. In this response, claims 29-55 have been added, and claims 1-28 have been cancelled. Applicant respectfully requests that the amendments being filed herewith be entered and request that there be reconsideration of all pending claims.

1. Rejection of Claims 1-28 under 35 U.S.C. §103

Claims 1-28 have been rejected under §103(a) as allegedly obvious over *Jebwab et al.* (U.S. 6,487,258) in view of *Wu* (U.S. 6,389,062). Claims 1-28 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot. Applicant takes this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicant reserves the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the cancelled subject matter to the public.

2. Newly Added Claims

Applicant submits that no new matter has been added in the new claims 29-55 and that new claims 29-55 are allowable over the cited references. Specifically, claim 29 is allowable for at least the reason that the cited references do not disclose, teach, or suggest the feature of “a receive line driver configured to receive the output of the DMT transmitter and to detect the transmitted symbol...and a gain calculation element configured to calculate at least a portion of the gain applied by the DMT transmitter to each of the plurality of transmit carrier tones.” Claim 38 is allowable for at least the reason that the cited references do not disclose, teach, or suggest

the feature of “wherein the DMT receiver is configured to detect the transmitted symbol at the output of the DMT transmitter and to separate the detected symbol into a plurality of received carrier tones and to supply a plurality of carrier tone scaling signals to the transmitter; wherein the DMT transmitter is further configured to apply a gain to each transmit carrier tone before transmitting, the gain applied to each tone based on a corresponding one of the plurality of carrier tone scaling signals.” Claim 43 is allowable for at least the reason that the cited references do not disclose, teach, or suggest the feature of “producing a local transmit signal carrying the symbol; detecting the symbol carried on the local transmit signal...and calculating at least a portion of the local gain.” Claim 48 is allowable for at “producing a local transmit signal carrying the symbol; detecting the symbol carried on the local transmit signal...adjusting the local gain applied to the at least one transmit carrier tone.” Claim 50 is allowable for at least the reason that the cited references do not disclose, teach, or suggest the feature of “means for producing a local transmit signal carrying the symbol; means for detecting the symbol carried on the local transmit signal...means for calculating at least a portion of the local gain.” Therefore, Applicant requests that the Examiner enter and allow the above new claims.

**CONCLUSION**

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and presently pending claims 29-55 be allowed to issue. Although some dependent claim rejections and some obviousness rejections are explicitly addressed above, the omission of arguments for other claims is not intended to be construed as an implied admission that Applicant agrees with the rejection or finding of obviousness for the respective claim or claims. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

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